

ABSTRACT

A back-up detecting device with a distance reset capability has a controller with an intensity analysis program and a distance reset function. When an ultrasonic transceiver is installed underneath a vehicle chassis forward of the rear end, a distance correction called a distance pad is measured, calculated and stored in memory by the distance reset function. The distance pad is the distance between the ultrasonic detector and the rear end of the vehicle. When the distance reset capability is used to determine a distance pad for each ultrasonic transceiver, the back-up detecting device presents accurate distances to objects without regard to the structure of the vehicle body without having to alter system hardware or software. Thus the back-up detecting device is suitable for large vehicles of varied shapes and sizes.